

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1056423

Luminaire Tested: S125R3DR-S375D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056423
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S375D850-X4F0-XX-UDD-FLL-W
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

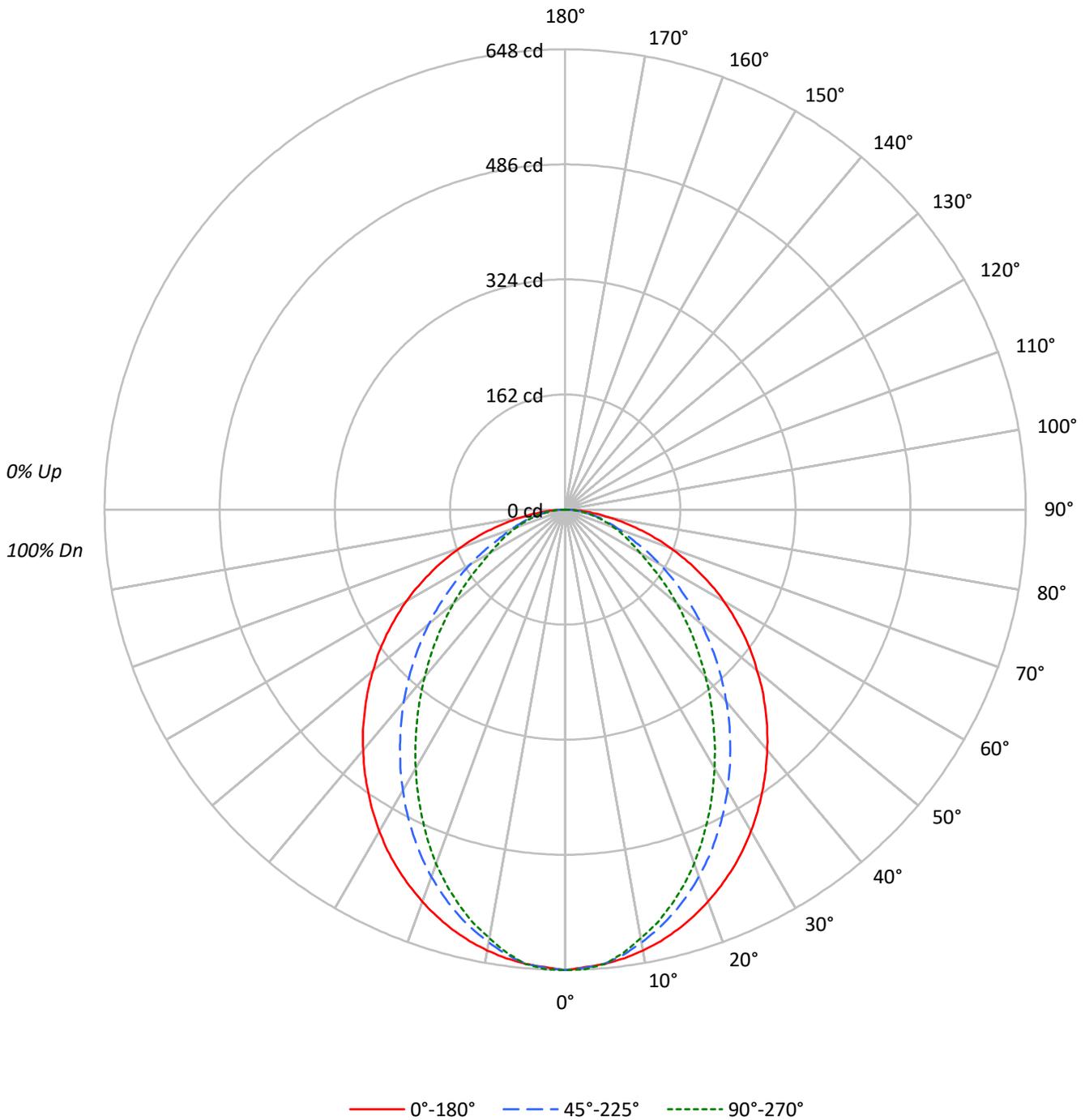
Lumens per Lamp: N/A
Luminaire Lumens: 1374.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1056423

CATALOG NUMBER: S125R3DR-S375D850-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot



TEST NUMBER: P1056423

CATALOG NUMBER: S125R3DR-S375D850-X4F0-XX-UDD-FLL-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86				86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55				55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48				48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34				34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31				31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4583	4583	4583
5°	4556	4552	4556
10°	4525	4442	4400
15°	4480	4306	4218
20°	4419	4140	3991
25°	4352	3942	3720
30°	4268	3727	3432
35°	4174	3495	3133
40°	4081	3257	2838
45°	3981	3006	2543
50°	3876	2749	2251
55°	3778	2469	1957
60°	3645	2170	1719
65°	3464	1842	1599
70°	3253	1645	1496
75°	2939	1516	1409
80°	2557	1376	1315
85°	1995	1217	1217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3981 cd/sqm



TEST NUMBER: P1056423

CATALOG NUMBER: S125R3DR-S375D850-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	4.4
10°-20°	166.5	12.1
20°-30°	235.3	17.1
30°-40°	259.0	18.8
40°-50°	241.6	17.6
50°-60°	192.9	14.0
60°-70°	129.8	9.4
70°-80°	69.1	5.0
80°-90°	19.2	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	462.4	33.7
0°-40°	721.4	52.5
0°-60°	1155.9	84.1
0°-90°	1374.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1374.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	648	648	648	648	648	
5°	642	647	642	640	642	61
15°	612	609	588	578	576	173
25°	558	541	505	483	477	257
35°	484	455	405	373	363	303
45°	398	361	301	264	254	307
55°	306	260	200	168	159	274
65°	207	162	110	98	96	205
75°	108	71	56	52	52	115
85°	25	17	15	15	15	29
90°	0	0	0	0	0	



TEST NUMBER: P1056423

CATALOG NUMBER: S125R3DR-S375D850-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	648.3	648.3	648.3	648.3	648.3
2.5°	644.9	650.2	645.9	646.8	647.8
5°	642.0	647.3	641.5	639.6	642.0
7.5°	637.2	641.5	631.9	627.5	629.4
10°	630.4	633.3	618.8	613.0	613.0
12.5°	622.2	622.2	604.8	596.6	596.6
15°	612.1	608.7	588.4	578.3	576.3
17.5°	600.5	594.2	570.1	557.0	554.6
20°	587.4	577.3	550.3	533.4	530.5
22.5°	573.0	559.9	528.6	507.8	504.4
25°	558.0	541.1	505.4	483.2	476.9
27.5°	541.1	520.8	481.7	456.6	448.9
30°	522.8	499.6	456.6	428.6	420.4
32.5°	503.9	477.9	431.1	401.1	392.0
35°	483.7	455.2	405.0	373.1	363.0
37.5°	463.4	432.5	379.4	346.1	335.5
40°	442.2	408.4	352.9	318.6	307.5
42.5°	420.9	384.7	326.8	292.0	280.4
45°	398.2	360.6	300.7	264.0	254.4
47.5°	376.5	336.0	275.1	239.4	228.8
50°	352.4	310.4	250.0	214.3	204.7
52.5°	330.2	285.3	224.9	191.6	181.5
55°	306.5	260.2	200.3	168.5	158.8
57.5°	281.9	235.1	176.7	146.7	137.6
60°	257.8	210.0	153.5	126.0	121.6
62.5°	233.1	186.3	131.8	110.5	107.6
65°	207.1	161.7	110.1	97.5	95.6
67.5°	182.5	138.1	92.7	85.4	83.5
70°	157.4	114.4	79.6	73.4	72.4
72.5°	132.7	91.7	67.1	62.8	61.8
75°	107.6	71.4	55.5	52.1	51.6
77.5°	84.5	53.6	43.9	42.5	41.5
80°	62.8	40.1	33.8	32.8	32.3
82.5°	43.0	27.5	24.1	24.1	23.2
85°	24.6	16.9	15.0	15.4	15.0
87.5°	9.2	7.2	6.8	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)